

SESSION 6 – BALLAST WATER TREATMENT TECHNOLOGIES

CHAIR

John Heisler, Environmental Protection Agency

Dorn Carlson, National Oceanic and Atmospheric Administration

Rich Everett, U.S. Coast Guard

COORDINATOR

Craig Vogt, Environmental Protection Agency

Dorn Carlson, National Oceanic and Atmospheric Administration

TITLE OF PRESENTATIONS AND SPEAKERS

“Shipboard Ballast Water Treatment Tests” by Allegra Cangelosi, Northeast/Midwest Institute

“Ballast Water Treatment on a Cruise Ship” by George Wright, Princess Cruise Lines

“Ballast Water Treatment on MV Cape May” by David Wright, University of Maryland

“Ballast Water Treatment on the Tonsina” by Bill Stubblefield, ENSR Corporation

“Environmental Technology Verification for Ballast Water” by Ray Frederick, Environmental Protection Agency

SUMMARY

As one of its foremost environmental concerns, the MTS report to Congress identified the possible introduction of organisms of invasive species in

untreated ship’s ballast water. A large variety of different treatment technologies to remove, kill, or inactivate aquatic organisms in ballast have been proposed or tested at the laboratory scale, but fewer have actually been subjected to controlled experiments on ships in actual field conditions. This session was mainly devoted to reports from researchers who had conducted such ship-board experiments. In these experiments, ballast water was treated by physically removing the organisms by filtration or centrifugation, by killing the organisms with ultraviolet light or chemical biocides, and by applying several different treatments in series. Researchers reported on the results of their work, and on the special challenges faced by investigators conducting controlled experiments on a full-scale operational ship. A presentation was also made on the “Environmental Technology Verification” program, a joint EPA-Coast Guard program designed to assist vendors of ballast water technologies in rigorously testing and reporting on the effectiveness of their technologies.